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Henry Tan

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INTELLECTUAL PROPERTY GROUP

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EXAMINER

DANG, HUNG Q

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|-----------------------------------|--|
| Office Action Summary | Application No. 10/586,070 | Applicant(s) TAN ET AL. | |
| | Examiner Hung Q. Dang | Art Unit 2621 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

Claims 13 and 34 are objected to because of the following informalities:

Claims 13 and 34 recites, "the portable storage device 11," which should be "the portable storage device". Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 16 and 18 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 16 recites the limitation "the computer". There is insufficient antecedent basis for this limitation in the claim.

Claim 18 recites the limitation "the biometrics-based authentication module". There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 20 is rejected under 35 U.S.C. 102(e) as being anticipated by Case (US 2005/0063418).

Regarding claim 20, Case discloses a device for recording and playing back audio and video signals ([0043]) comprising a computer connector for direct connection to a computer ([0038]) and a separate television a/v connector for direct connection to a television ([0034]; [0042]; [0044]).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabatabai et al. by (US 2003/0110297) and Case (US 2005/0063418).

Regarding claim 1, Tabatabai et al. disclose a device for recording and playing back video signals comprising: a portable storage device ([0055]); a portable storage device connector of a first type adapted to transfer video signals of a first type and which is mounted on the portable storage device (Fig. 7; [0055]); a first video system having a first video system connector of the first type for directly connecting to the portable storage device connector to transmit video signals of the first type to the portable storage device from the first video system to record and playback video signals of the first type (Fig. 7; [0055]); a second video system for receiving video signals of a second type (Fig. 7; [0040]; [0041]; [0054]); and an interface section having an interface

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section connector of the first type for directly connecting to the portable storage device (Fig. 7; [0055]), the interface section converting to the video signals of the first from second type ([0044]), and transmitting the signals of the first type to the portable storage device through the interface section connector of the first type ([0055]) and exchanging the signals of second type between the first video system and the second video system through a signal connection between the interface section and the second video system ([0044]; [0054]).

However, Tabatabai et al. do not disclose the first video system receives the signals of first type from the portable storage device; converting to the video signals of the second type from the first type; transmitting the signals of the first type from the first video system to the second video system through the interface section connector of the first type and a signal connection between the interface section and the second video system.

Case discloses a first video system receives the signals of first type from a local storage device ([0036]-[0038]; [0041]); converting to the video signals of the second type from the first type ([0032]; [0036]-[0038]; [0042]); transmitting the signals of the first type from the first video system to the second video system through the interface section connector of the first type and a signal connection between the interface section and the second video system (Fig. 3; Fig. 4; [0040]; [0043]; [0044]; [0044]).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Case into the device disclosed by

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Tabatabai et al. in order to increase flexibility of the device by allowing bi-directional exchanges of video data between devices.

Regarding claim 2, Tabatabai et al. and Case also disclose the video signals of the first type and second type also include audio signals which are recorded and played back by the device (Tabatabai et al.: [0054]; [0055]. Case: [0041]; [0042]).

Claims 3-15, 19, 22-36, and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabatabai et al. by (US 2003/0110297) and Case (US 2005/0063418) as applied to claims 1-2 above, and further in view of Kumagai (US Patent 6,512,722).

Regarding claim 3, see the teachings of Tabatabai et al. and Case as discussed in claim 1 above. However, Tabatabai et al. and Case do not disclose the portable storage device comprises at least 8MB of non-volatile solid-state memory storing video data in compressed format and a built-in encoder/decoder engine for compressing and decompressing the video data.

Kumagai discloses a portable storage device comprises at least 8MB of non-volatile solid-state memory storing digital data in compressed format and a built-in encoder/decoder engine for compressing and decompressing the digital data (Fig. 5; Fig. 6; column 14, lines 55-59; column 15, lines 1—23, 56-62).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Kumagai into the device disclosed by Tabatabai et al. and Case in order to enhance storage capacity of the device by using

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large storage capacity memory and compressing data before storage, and to play back compressed digital data.

Regarding claim 4, Kumagai also discloses the portable storage device further comprises a built-in microcontroller for controlling the solid-state memory “CPU 105” of Fig. 5 and Fig. 6) while Tabatabai et al. and Case disclose a protocol controller for converting the video data to and from video signals of the first type (Tabatabai et al.: [0055]. Case: [0036]-[0038]; [0041]; [0042]).

Regarding claim 5, Tabatabai et al. also disclose wherein the signal connection between the interface section and the second video system further comprises an interface connector of a second type mounted to the interface section for direct connection to a second video system connector mounted to the second video system for exchanging the signals of the second type through the interface section connector of the second type and the second video system connector of the second type (Fig. 3; Fig. 7; [0039]-[0041]; [0050]).

Regarding claim 6, Tabatabai et al. and Case also disclose wherein the first video system is a computer (Tabatabai et al.: [0053]) and the second video system is a television (Case: [0034]; [0042]; [0044]).

Regarding claim 7, Tabatabai et al. also disclose the first video system is a computer ([0053]); the portable storage device connector is a USB connector ([0055]); the first video system connector of the first type and interface connector of the first type are USB connectors ([0055]; Fig. 7); the video signals of the first type are USB protocol signals ([0055]; Fig. 7); and the protocol controller is a USB controller ([0055]; Fig. 7).

Tabatabai et al., Case, and Kumagai do not disclose the portable storage device connector is a USB male-type connector and the first video system connector of the first type and the interface connector of the first type are USB female-type connectors.

Official Notice is taken that one of ordinary skill in the art would have been motivated to use a USB male-type connector for the portable storage device connector and USB female-type connectors for the first video system connector of the first type and the interface connector of the first type to provide users with various connecting options.

Regarding claim 8, Case also disclose the first video system is a television ([0034]; [0042]; [0044]); the portable storage device connector is a HDMI connector ([0032]); the first video system connector of the first type and interface connector of the first type are HDMI connectors ([0032]); the video signals of the first type are HDMI protocol signals ([0032]); and the protocol controller is a HDMI interface ([0032]).

Regarding claim 9, Case also disclose the second video system is a television ([0034]; [0042]; [0044]); the second video system connector of the second type is an HDMI connector ([0032]); the video signals of the second type are HDMI protocol signals ([0032]); the signal connection between the interface section and the second video system connector is comprised of an HDMI connector mounted on the interface section for direct connection to the second video system connector ([0032]; Fig. 3; Fig. 4); and the interface section converts between the USB and HDMI protocol signals ([0032]; [0036]; Fig. 3; Fig. 4).

Regarding claim 10, Case also discloses the interface section comprises a microcontroller for converting between the USB and HDMI protocol signals and wherein the microcontroller is electrically connected between a USB controller connected to the interface section connector of the first type and an HDMI controller connected to the HDMI connector mounted on the interface section (Fig. 3; Fig. 4; [0032]; [0036]).

Regarding claim 11, Tabatabai et al. also disclose wherein the interface section is integral with the second video system ([0054]).

Regarding claim 12, Tabatabai et al. also disclose the interface section is integral with the portable storage device ([0054]).

Regarding claim 13, Tabatabai et al. also disclose the portable storage device, when in use, is not in signal communication with both the first and second video systems (Fig. 7; [0055]).

Regarding claim 14, Case also disclose the interface section is encased in a housing separate from the portable storage device, the first video system and the second video system ("Media Center" in Fig. 4; [0040]).

Regarding claim 15, see the teachings of Tabatabai et al. and Case as discussed in claim 2 above. Further, Tabatabai et al. also disclose a protocol controller to convert the video data between the compressed format and video signals of the first type, the format of the compressed data selected from the set consisting of: MPEG 1, MPEG 2, MPEG-4, MP3, MPEG 7 and MPEG 21 ([0023]; [0039]; [0055]).

However, Tabatabai et al. and Case do not disclose the portable storage device comprises at least 8MB of non-volatile solid-state memory storing video data in

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compressed format and a built-in encoder/decoder engine for compressing and decompressing the video data.

Kumagai discloses a portable storage device comprises at least 8MB of non-volatile solid-state memory storing digital data in compressed format and a built-in encoder/decoder engine for compressing and decompressing the digital data (Fig. 5; Fig. 6; column 14, lines 55-59; column 15, lines 1—23, 56-62).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Kumagai into the device disclosed by Tabatabai et al. and Case in order to enhance storage capacity of the device by using large storage capacity memory and compressing data before storage, and to play back compressed digital data. Also, one of ordinary skill in the art at the time the invention would have been recognize that these elements must be working in cooperation in order to receive, compress, and store the data in a meaningful sequence.

Regarding claim 19, Case also discloses a key matrix coupled to the microcontroller to allow a user to control the recording and playing back of the video signals (“Keyboard 79” in Fig. 3; “Wireless Keyboard 145” in Fig. 4).

Regarding claim 22, Tabatabai et al. disclose a method for recording and playing back video signals comprising the steps of: directly connecting a portable storage device connector of a first type mounted on a portable storage device to a first video system-connector of the first type of a first video system ([0055]); transferring video signals of the first type from the first video system to the portable storage device

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through the first video system connector and the portable storage device connector ([0055]).

However, Tabatabai et al. do not disclose encoding the video signals into compressed video data using an encoder engine built-into the portable storage device; storing the compressed video data in a memory section of the portable storage device to record the video signals of the first type; disconnecting the portable storage device connector of the first type from the first video system connector of the first type; directly connecting the portable storage device connector of the first type mounted on the portable storage device to an interface section connector of the first type of an interface section; decoding the compressed video data into decoded video signals using a decoder engine built into the portable storage device; passing the video signals of the first type through the portable storage device connector of the first type and the interface section connector of the first type into the interface section; converting the video signals of the first type into video signals of a second type by passing the signals through the interface section; passing the video signals of the second type to a second video system through a signal connection between the interface section and the second video system; and playing back the video signals on the second video system.

Case discloses directly connecting a portable storage device connector of the first type mounted on the portable storage device to an interface section connector of the first type of an interface section ([0041]); converting the video signals of the first type into video signals of a second type by passing the signals through the interface section ([0042]; [0043]; [0036]-[0040]); passing the video signals of the second type to a second

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video system through a signal connection between the interface section and the second video system ([0042]; [0043]; [0036]-[0040]); and playing back the video signals on the second video system ([0042]; [0043]).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Case into the method disclosed by Tabatabai et al. in order to increase flexibility of the device by allowing bi-directional exchanges of video data between devices.

However, Tabatabai et al. and Case do not disclose encoding the video signals into compressed video data using an encoder engine built-into the portable storage device; storing the compressed video data in a memory section of the portable storage device to record the video signals of the first type; disconnecting the portable storage device connector of the first type from the first video system connector of the first type; and decoding the compressed video data into decoded video signals using a decoder engine built into the portable storage device.

Kumagai disclose encoding the video signals into compressed video data using an encoder engine built-into the portable storage device (Fig. 5; Fig. 6; column 14, lines 55-59; column 15, lines 1—23, 56-62); storing the compressed video data in a memory section of the portable storage device to record the video signals (Fig. 5; Fig. 6; column 14, lines 55-59; column 15, lines 1—23, 56-62); and decoding the compressed video data into decoded video signals using a decoder engine built into the portable storage device (Fig. 5; Fig. 6; column 14, lines 55-59; column 15, lines 1—23, 56-62).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Kumagai into the device disclosed by Tabatabai et al. and Case in order to enhance storage capacity of the device by compressing data before storage.

However, Tabatabai et al., Case, and Kumagai do not explicitly disclose disconnecting the portable storage device connector of the first type from the first video system connector of the first type.

It would be obvious to one of ordinary skill in the art that a user can perform the step of disconnecting the portable storage device connector of the first type from the first video system connector of the first type after downloading and reconnecting to the interface section to transfer data to other devices as he or she desires.

Regarding claim 23, Case also disclose the signal connection between the interface section and the second video system comprises an interface connector of a second type mounted to the interface section directly connected to a second video system connector mounted to the second video system for exchanging the signals of the second type through the interface section connector of the second type and the second video system connector of the second type ([0042]; [0043]; [0035]-[0040]; Fig. 3; Fig. 4).

Claim 24 is rejected for the same reason as discussed in claim 2 above.

Claim 25 is rejected for the same reason as discussed in claim 3 above.

Claim 26 is rejected for the same reason as discussed in claim 4 above.

Claim 27 is rejected for the same reason as discussed in claim 6 above.

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Claim 28 is rejected for the same reason as discussed in claim 7 above.

Claim 29 is rejected for the same reason as discussed in claim 8 above.

Claim 30 is rejected for the same reason as discussed in claim 9 above.

Claim 31 is rejected for the same reason as discussed in claim 10 above.

Regarding claim 32, Tabatabai et al. also disclose the interface section is integral with the first video system (Fig. 7).

Claim 33 is rejected for the same reason as discussed in claim 12 above.

Claim 34 is rejected for the same reason as discussed in claim 13 above.

Claim 35 is rejected for the same reason as discussed in claim 14 above.

Claim 36 is rejected for the same reason as discussed in claim 15 above.

Claim 40 is rejected for the same reason as discussed in claim 19 above.

Claims 16 and 37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabatabai et al. by (US 2003/0110297), Case (US 2005/0063418), and Kumagai (US Patent 6,512,722) as applied to claims 1-15, 19, 22-36, and 40 above, and further in view of Soundararajan (US Patent 7,355,624).

Regarding claim 16, see the teachings of Tabatabai et al., Case, and Kumagai as discussed in claim 15 above. However, Tabatabai et al., Case, and Kumagai do not disclose the built-in encoder/decoder engine is programmable by the computer to encode/decode different compressed data formats.

Soundararajan discloses in encoder and decoder engines are programmable by a computer to encode/decode different compressed data formats (column 3, lines 3-25; column 5, lines 35-47).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Soundararajan into the device disclosed by Tabatabai et al., Case, and Kumagai in order to provide users with programmable features.

Claim 37 is rejected for the same reason as discussed in claim 16 above.

Claims 17-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabatabai et al. by (US 2003/0110297) and Case (US 2005/0063418) as applied to claims 1-2 above, and further in view of Poo et al. (US 2003/0005337).

Regarding claim 17, see the teachings of Tabatabai et al. and Case as discussed in claim 3 above. However, Tabatabai et al. and Case do not disclose a biometrics-based authentication module coupled to and controlled by the microcontroller, wherein access to the non-volatile memory is granted to a user provided that the biometrics-based authentication module authenticates the user's identity and wherein access to the non-volatile memory is denied to the user otherwise.

Poo et al. disclose a biometrics-based authentication module coupled to and controlled by the microcontroller, wherein access to the non-volatile memory is granted to a user provided that the biometrics-based authentication module authenticates the user's identity and wherein access to the non-volatile memory is denied to the user otherwise (abstract, [0007]).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the teachings of Poo et al. into the device disclosed by

Tabatabai et al. and Case in order to protect data from unauthorized access thus providing for data security.

Regarding claim 18, Poo et al. also disclose in the biometrics-based authentication module includes a fingerprint sensor for acquiring data from the fingerprint of the user (abstract, [0007]).

Although Poo et al. do not explicitly disclose sensing the thumbprint of the user. One of ordinary skill in the art would have been motivated to sense the thumbprint of the user as an obvious choice of implementation.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Case (US 2005/0063418) as applied to claim 20 above, and further in view of Kumagai (US Patent 6,512,722).

Regarding claim 21, see the teachings of Case as discussed in claim 20 above. However, Case does not disclose wherein the computer connector and television a/v connector are mounted to separate housings.

Kumagai disclose a multimedia data server with a computer connector is mounted to a separate housing (Fig. 10; column 21, line 64 – column 22, line 1).

One of ordinary skill in the art at the time the invention was made would have been motivated to incorporate the multimedia data server disclosed by Kumagai into the device disclosed by Case in order to facilitate searching operations and management of the data recorded (Kumagai, column 21, lines 57-60).

Claims 38-39 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tabatabai et al. by (US 2003/0110297), Case (US 2005/0063418), and Kumagai

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(US Patent 6,512,722) as applied to claims 1-15, 19, 22-36, and 40 above, and further in view of Poo et al. (US 2003/0005337).

Claim 38 is rejected for the same reason as discussed in claim 17 above.

Claim 39 is rejected for the same reason as discussed in claim 18 above.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Q. Dang whose telephone number is (571)270-1116. The examiner can normally be reached on IFT.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, THAI Q. TRAN can be reached on 571-272-7382. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Hung Q Dang/
Examiner, Art Unit 2621

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2621